## Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554 FEDERAL COMMUNICATIONS COMMISSION

In the Matter of

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Redevelopment of Spectrum to Encourage Innovation in the Use of ) New Telecommunications Technologies)

> FEDERAL CONTRIBUTIONS COMMISSION OFFICE OF THE SECRETARY REPLY COMMENTS OF COMMUNICATIONS SATELLITE CORPORATION

Communications Satellite Corporation (COMSAT), through its COMSAT Mobile Communications Division, hereby submits the following response to the comments filed in ET Docket No. 92-9 regarding the reallocation of the band 1.85-2.2 GHz for use by emerging telecommunications technologies.1 The comments were divided between those focused on the need to develop the proposed 2 GHz band for future personal communication services (PCS) and those concerned about relocation of existing fixed microwave operations. Those responding to the comments, including COMSAT, who are concerned with introducing new mobile services to the marketplace using emerging telecommunications technologies all strongly support the Commission's initiatives and generally agree that the proposed band is the appropriate part of the spectrum to encourage innovative use of new technologies. On the other hand, those with fixed microwave operations in the proposed band are concerned about relocation to other bands and compensation for costs to relocate.

COMSAT continues to believe that the Commission has selected

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<sup>&</sup>lt;u>See</u> Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, 7 FCC Rcd 1542 (1992) (NPRM).

the most appropriate band for redevelopment. The results of WARC-92 confirm the worldwide consensus that mobile-satellite services (MSS) and terrestrial mobile services are the innovative growth services for the future which should be allocated in the 1850-2200 In our view, this band is well suited to technically MHz band. support PCS mobile and mobile-satellite communications. operations in the band, which currently enjoy co-primary status with Mobile, can and should be relocated to higher frequency bands over a transition period to minimize negative impacts. COMSEARCH explained in its comments, fixed microwave systems with long path links now operating at around 2 GHz (1850-1990 and 2110-2200 MHz) can perform as well in bands above 3 GHz. Furthermore, short range links could also operate in bands such as 6.7 GHz and users of microwave paths less than 10 miles can use even higher bands, i.e., above 10 GHz. American Personal Communications (APC) points out in its comments that use of higher bands for short range links would conserve frequencies at 4 and 6 GHz for links requiring longer path lengths.3

Thus, COMSAT recommends that the Commission proceed to redevelop the proposed 2 GHz band as stated in the NPRM and to allocate the band to mobile and mobile-satellite services. With regard to timing of any relocation of fixed users, COMSAT does not

See Comments of COMSEARCH, Exploring Alternate Bands For 1.9 GHz Systems, ET Docket No. 92-9.

See Comments of American Personal Communications, ET Docket No. 92-9 at 22-23.

agree with those who advocate an immediate, wholesale clearing of the 2 GHz band. A phased transition plan where segments of the 1.85-2.2 GHz band are redeveloped in stages would support PCS start up efforts in the near term and also provide time for existing fixed users to depreciate existing plant while relocating to other bands. Furthermore, as we explained in our comments, MSS can share during any transition period with many types of fixed microwave systems under appropriate conditions.

In redeveloping the proposed band for mobile (terrestrial) and mobile-satellite services, the Commission should consider the need to partition the band for separate frequency assignments for these two services. These assignments could be in adjacent frequency bands, which would facilitate a "hand-off" of service from a satellite to a terrestrial mode of communications when, for example, a mobile user travels from a rural to an urban region. As COMSAT and various terrestrial PCS interests recognized in their comments, potential interference problems would likely impede the full development of either service if they operate co-channel in the same geographic area. To avoid any difficulties, the Commission should plan to avoid any co-channel assignments to mobile/terrestrial PCS and mobile-satellite services in the proposed 2 GHz band. The WARC-92 Conference recognized this potential problem when it agreed to allocate additional global spectrum to MSS at 1980-2010 MHz and 2170-2200 MHz, and spectrum for the development of terrestrial PCS at 1885-2025 MHz and 21102200 MHz.4

COMSAT continues to oppose as unnecessary those suggestions that the Commission develop and orchestrate a program to compensate the relocated fixed operators. Compensation should be a matter left to the parties concerned to negotiate financial arrangements on an individual basis in those situations where relocation is necessary to avoid unacceptable levels of interference. The Commission's role initially should be to establish a transition period during which these negotiations could take place. Meanwhile, in a separate parallel proceeding, the Commission could proceed to determine the terms, conditions, and operating requirements for fixed services relocated from the 2 GHz band to other appropriate bands.

Respectfully submitted, COMMUNICATIONS SATELLITE CORPORATION

v: ( 🗸

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July 8, 1992

See Addendum and Corrigendum to the <u>Final Acts of the World Administrative Radio Conference</u>, Malaga-Torremoloinos, 1992, ftn 746A, at 17-18. Footnote 746A declared that while these frequencies bands are intended for use by administration wishing to implement FPLMTS, FPLMTS does not preclude other services, such as MSS, from utilizing their allocation.

## CERTIFICATE OF SERVICE

I, Sandra M. Hunt, hereby certify that the foregoing "Reply Comments" was served by hand, this 8th day of July, 1992, on the following:

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